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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL MULLIGAN

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Appeal 2008-0686  
Application 10/036,058  
Technology Center 2100

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Decided: June 27, 2008

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Before JEAN R. HOMERE, JAY P. LUCAS, and  
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-35 and 37-39. Claim 36 has been allowed. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM IN PART.

## THE INVENTION

The disclosed invention relates generally to network communications systems. More particularly, Appellant's invention is directed to a system and method for provisioning mobile clients on a network via a provisioning Web service (Spec. 1).

Independent claims 1 and 37 are illustrative:

1. A method for provisioning mobile terminals for use of applications offered by one or more network services on a network, comprising:

interfacing at least one mobile terminal to at least one network service via a provisioning Web service, wherein the provisioning Web service is implemented using Web Services and provides a single point of interface for the network service for provisioning the mobile terminal; and

provisioning the mobile terminal by the provisioning Web service for use of at least one application provided by the network service, wherein the provisioning comprises configuring the mobile terminal for use of the application and delivering the application to the mobile terminal.

37. A suite of Web services to provision a terminal for use of an application on a network, comprising:

a client provisioning Web service to interface at least one mobile terminal to at least one network service, wherein the client provisioning Web service provides a

single point of interface to the network service for provisioning the mobile terminal for use of the application provided by the network service;

a terminal management Web service to configure application use settings on the mobile terminal to enable use of the application;

a presence Web service connected via the network to the mobile terminal to receive at least a terminal type of the mobile terminal;

a delivery Web service coupled to the presence Web service to receive the terminal type from the presence Web service, and to identify a data object for delivery corresponding to the terminal type upon successful configuration of the application use settings on the mobile terminal; and

a notification Web service coupled to the delivery Web service to deliver the data object to the mobile terminal if the terminal type indicates that the mobile terminal is capable of receiving the data object via a push operation, and to deliver to the mobile terminal an address of the data object stored at the delivery Web service if the terminal type indicates that the mobile terminal is not capable of receiving the data object via a push operation.

#### THE REFERENCES

The Examiner relies upon the following references as evidence in support of the rejections:

Rosenberg	US 2003/0013434 A1	Jan. 16, 2003 (filed Jul. 12, 2001)
Rankin	US 2003/0207685 A1	Nov. 6, 2003 (filed Apr. 12, 2001)

Seely, Scott, *Web Service description and Discovery Using UDDI, Part II*, Microsoft Corporation, (2001).

#### THE REJECTIONS

1. Claims 1-3, 8-31, 33-35, 38, and 39 stand rejected under 35 U.S.C. §102(e) as being anticipated by Rosenberg.
2. Claims 4-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rosenberg in view of Seely.
3. Claim 32 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rosenberg in view of Seely and Rankin.
4. Claim 37 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rosenberg in view of Rankin.

#### Grouping of Claims

Appellant presents arguments directed to the anticipation rejection of claims 1-3, 8-31, 33-35, 38, and 39 as a single group (App. Br. 9-11). Pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii), we select claim 1 as the representative claim for the anticipation rejection.

Regarding dependent claims 4-7, we consider separately the issue of the combinability of the Rosenberg and Seely references and the specific limitations argued by Appellant.

We reverse the Examiner's rejection of dependent claim 32 and independent claim 37, as discussed *infra*.

#### PRINCIPLES OF LAW - Anticipation

In rejecting claims under 35 U.S.C. § 102, “[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation.” *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1375-76 (Fed. Cir. 2005) (citation omitted).

#### ANALYSIS

##### Independent Claim 1

Regarding the anticipation rejection, Appellant contends that Rosenberg does not disclose using a provisioning Web service to provision a mobile device, as claimed (App. Br. 9). Appellant grounds this argument on the basis that (1) Rosenberg instead teaches manual provisioning (*id.*), and, (2) that “web services” is a specific term of art (App. Br. 10).

Regarding the first ground, we address arguments presented in the Briefs only to the extent that Appellant's arguments are directed to claimed subject matter. Patentability is based upon the claims. “It is the *claims* that measure the invention.” *SRI Int'l v. Matsushita Elec. Corp. of America*, 775

F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*). “Moreover, limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)). Here, we find no limitations recited in representative claim 1 that preclude any degree of manual provisioning (or configuration setup) that may be performed in addition to “provisioning the mobile terminal by the provisioning Web service . . . ,” as claimed (claim 1).

Regarding the second ground (i.e. the scope of the claimed “Web services”), “the PTO gives claims their ‘broadest reasonable interpretation.’” *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). From our review of the record, we find no express definition of this term in Appellant’s Specification. Instead, Appellant broadly describes “web services” in the context of nebulous “emerging standards” where such “web services” are “network-based (particularly Internet-based) modular applications that perform a specific task and conform to a specific technical format,” as follows:

In accordance with an exemplary embodiment of the present invention, the provisioning interface 106 is provided in the context of a “Web service.” Web Services are network-based (particularly Internet-based) modular applications that perform a specific task and conform to a specific technical format. Web services are represented by a stack of emerging standards that describe a service-oriented, component-based application architecture, collectively providing a distributed computing paradigm having a particular focus on delivering services across the Internet. Generally, Web services are self-contained

modular applications that can be published in a ready-to-use format, located, and invoked across the World Wide Web. When a Web service is deployed, other applications and Web services can locate and invoke the deployed service. They can perform a variety of functions, ranging from simple requests to complicated business processes.  
(Spec. 10, ll. 10-21).

It is our view that virtually any software invoked over the Internet is a network-based “modular” application that performs a specific task and conforms to a specific technical format. Given the sweeping breadth of “web services” as described in Appellant’s disclosure, we conclude that Appellant has not met the burden of showing error in the Examiner’s findings regarding Rosenberg’s wireless service provider 50 that includes activation web server 51 (Fig. 4) (*see* Ans. 10). Thus, contrary to Appellant’s arguments, we agree with the Examiner that Rosenberg reasonably discloses using a provisioning Web service to provision a mobile device. Accordingly, we sustain the Examiner’s rejection of representative claim 1 (and claims 2, 3, 8-31, 33-35, 38, and 39 that fall therewith) as being anticipated by Rosenberg.

#### PRINCIPLES OF LAW - Obviousness

“What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007). To be nonobvious, an improvement must be



“more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740. Appellant has the burden on appeal to the Board to demonstrate error in the Examiner’s position. See *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)). Therefore, we look to Appellant’s Brief to show error in the proffered *prima facie* case.

#### Dependent claims 4-7

Appellant contends that claims 4-7 are allowable over Rosenberg and Seely by virtue of their dependence upon independent claim 1 (App. Br. 11). In response, we see no deficiencies regarding Rosenberg with respect to claim 1, as discussed *supra*.

Regarding the combinability of Rosenberg and Seely, Appellant contends that neither reference provides motivation to use a web service to provision a mobile terminal (App. Br. 12).

We find this argument unavailing, because we have found that Rosenberg discloses using a provisioning Web service to provision a mobile device, as discussed *supra* in the context of claim 1. Moreover, we conclude that Appellant’s claims are directed to familiar elements and protocols (such as a Universal Description, Discovery, and Integration (UDDI) registry, a

service endpoint, and the use of the Simple Object Access Protocol (SOAP)) that would have been readily combinable by an artisan possessing ordinary skill, creativity,<sup>1</sup> and common sense using known methods in a manner that would have yielded predictable results. Our reviewing court has reaffirmed that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1739).

Regarding the specific limitations argued by Appellant for claims 5 and 7, we note that Appellant acknowledges in the Brief that “Seely teaches some basic implementation details of registering a Web service with a UDDI directory.” (App. Br. 12, ¶4, first sentence). We also find that Seely expressly teaches the use of endpoints in the context of a web service (*see e.g.*, Seely, page 7, ¶4). Because UDDI is a platform-independent, XML-based registry for businesses worldwide to list themselves on the Internet, it is our view that the limitations of “interfacing the Web service endpoint with a service registry to advertise the provisioning Web service” are taught and/or suggested by the Examiner’s proffered combination of Rosenberg and Seely (*see* claim 5). Likewise, we conclude that the weight of the evidence supports the Examiner’s position that the limitations of claim 7 (i.e., “enabling the application to initiate requests to provision the mobile

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<sup>1</sup> Courts should “take account of the inferences and creative steps that a

terminals via the Web service endpoint”), are taught and/or suggested by the proffered combination of Rosenberg and Seely. In particular, we note that Rosenberg is directed to automatically provisioning wireless services on a wireless device, albeit after some initial user setup (Rosenberg, ¶¶[0027-0029]).

On this record, we conclude that Appellant has not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner’s rejection of claims 4-7. Therefore, we sustain the Examiner’s rejection of claims 4-7 as being unpatentable over Rosenberg in view of Seely.

#### Dependent Claim 32

For convenience, we reproduce the language of claim 32 below:

32. The system as in claim 27, wherein the provisioning Web service further comprises a notification module coupled to the data object delivery module to notify the mobile terminal that the application is available at the data object deliver module, if the mobile terminal is not capable of direct delivery receipt by the data object delivery module, and to provide an address of the application at the data object delivery module.

Appellant contends the tertiary Rankin reference fails to overcome the deficiencies of Rosenberg and Seely. In particular, Appellant contends that the aforementioned references do not teach provisioning a mobile terminal

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person of ordinary skill in the art would employ.” *KSR*, 127 S. Ct. at 1741.

by a provisioning Web service implemented using Web Services (App. Br. 13).

In response, we see no deficiencies with Rosenberg and Seely. We previously found that Rosenberg teaches using a provisioning Web service to provision a mobile device (see discussion of claim 1, *supra*).

Appellant further contends the Rankin reference does not teach providing an address of a data object delivery module if a terminal is not capable of direct delivery receipt (App. Br. 14). Instead, Appellant contends that the cited paragraph 38 of Rankin merely describes tailoring network Quality of Service (QoS) (*id.*).

For convenience, we reproduce the Rankin's paragraph 38 below:

[0038] As represented by FIG. 4, each beacon 50 emits, in pulsed mode, a frame 52 of barcode slots offering connection "bridges" i.e. data enabling or supporting connection to various local services. The frame 52 is received by mobile device 18 with a connection pointer pi being used to initiate a service from service provider 54: the service may comprise a telecommunications or web-based service or some other arrangement for information delivery dependent on the capabilities of the mobile device 18. Prior to service activation by service provider 54 with a selected quality of service QoS, a negotiation or comparison process occurs between the stored user profile SUP (held in storage at 56) and characteristics of the service class as specified by Ci to optimise the selection of service class and QoS. The chosen QoS should fit the user's context, and acceptable charging rate. Therefore different QoS specifications may have different priorities at different times of the user's day.

(Rankin, ¶[0038]).

After considering the evidence before us, we agree with Appellant that the argued limitations (providing an address of a data object delivery module if a terminal is not capable of direct delivery receipt) are not taught nor fairly suggested by Rankin (or by Rosenberg or Seely). In particular, Rankin expressly discloses that the service pointer  $pi$  (i.e., address pointer) is activated by the user only if the service of class  $Ci$  matches a table of service classes held on the mobile device, as follows:

[0040] *If a service of class  $Ci$  matches a table of classes held on the mobile device 18, then in a first option the user is alerted and may with a single key press on the mobile 18 activate the service pointer  $pi$ . In an alternative arrangement, the mobile 18 first automatically issues (e.g. via SMS) a request to remote beacon website BS hosted by application server 34 for a more exact correlation between the services details (as held in local storage 58 by application server 34) and the stored SUP. If the service is deemed to match the user's current interest and intent, a positive answer is returned to the mobile 18 and only then is the user alerted by the mobile of the service's presence. The user then has the choice to activate the service automatically via its pointer  $pi$  being sent to service provider 54.*

(Rankin, ¶[0040]). (Emphasis added).

Because Rankin teaches that the user provides (i.e., activates) the service pointer  $pi$  (address pointer) if there is a match, we agree that Rankin teaches away from the claimed limitations of providing an address of a data object delivery module if a terminal is *not capable* of direct delivery receipt

by the data object delivery module (claim 32, *see also* App. Br. 14). Moreover, we note that the address *pi* is clearly shown in Rankin's Figure 4 as being provided *from* mobile device 18 *to* service 54 (see dotted *pi* line and arrow in Fig. 4). This is the opposite of what the claim requires, i.e., an address of the application (i.e., service) being provided at the data object delivery module (delivery service 304) that is part of Appellant's Web service 300, this being located on the server side (*see* Spec. 14, ll. 18-22, Fig. 3). Because we conclude that Appellant has shown the Examiner erred, we reverse the Examiner's rejection of claim 32 as being unpatentable over Rosenberg in view of Seely and Rankin.

#### Independent claim 37

Appellant contends that neither Rosenberg nor Rankin teaches delivering to a mobile terminal an address of the data object stored at a delivery Web service if the terminal type indicates that the mobile terminal is not capable of receiving the data object via a push operation (App. Br. 15, ¶1).

Regarding the claimed "push operation" argued by Appellant, we find nothing in the Examiner's statement of the rejection (Ans. 9-10), nor in the Examiner's response to arguments (Ans. 16-17) that squarely addresses the "push operation" aspect of the argued limitations. Moreover, we have fully addressed the negative limitation (of providing an address if the mobile terminal is not capable of receiving the data object) with respect to the

rejection of claim 32 that we have reversed above. For at least these reasons, we reverse the Examiner's rejection of independent claim 37 as being unpatentable over Rosenberg in view of Rankin.

#### CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellant has met his burden of showing that the Examiner erred in rejecting claims 32 and 37 under 35 U.S.C. § 103(a) for obviousness.

However, we conclude that Appellant has not met his burden of showing that the Examiner erred in rejecting claims 1-3, 8-31, 33-35, 38, and 39 under 35 U.S.C. § 102(e) for anticipation and claims 4-7 under 35 U.S.C. § 103(a) for obviousness.

#### DECISION

We affirm the Examiner's decision rejecting claims 1-3, 8-31, 33-35, 38, and 39 under 35 U.S.C. § 102(e).

We affirm the Examiner's decision rejecting claims 4-7 under 35 U.S.C. § 103(a).

We reverse the Examiner's decision rejecting claims 32 and 37 under 35 U.S.C. § 103(a).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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